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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/414,507	10/08/1999	RYUICHI SHIOHARA	Q56144	3387

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EXAMINER

TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/414,507

Applicant(s)

SHIOHARA ET AL.

Examiner

Nhan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new grounds of rejection.

Claim Objections

2. Claim 12 is objected to because of the limitation "the external recording medium" in line 4 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 1-2, 9-12, 19-27, 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Aizawa et al (US 6,452,629).

Regarding claim 1, Aizawa discloses a function appending method for a digital camera (digital camera 100; Fig. 1) which records image data by converting an image pickup light photoelectronically, comprising:

selecting (using button 117) program installing at the digital camera (col. 6, lines 18-21);

waiting (step S405) for a program transmitting command from an external recording medium (computer 200) (Fig. 4; col. 6, lines 27-35, wherein the digital camera must wait during reading out and transmitting configuration mode from the computer to the camera via cable 115;

In another technical view, it should be noted that this feature is also inherent in communication between a camera and computer for waiting for *handshaking* to be established in case the communication line 115 is a serial communication as described in col. 5, lines 40-42);

receiving (steps S405 - S409) the program transmitting command from the external recording medium (Fig. 4; col. 6, line 27-52, also note the Examiner's analysis for the *handshaking* above)

transmitting a request-to-send program command (YES between S409 and S410) to the external recording medium;

receiving (step S410) a program recorded on the external recording medium connected to the digital camera exchangeably (col. 6, lines 53-54);

storing the program into a recording medium (EEPROM 112) provided in the digital camera, and reading the program from the recording medium in the digital camera at a desired

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time (decided by the user); and executing the program (col. 6, lines 53-54 and col. 10, lines 41-49).

Regarding claim 2, see the analysis of claim 1.

Regarding claims 9 & 10, it is clear that the program can be stored in EEPROM 112, RAM 107, or recording medium 109 (col. 6, lines 53-54; col. 7, lines 1-4 and col. 10, lines 41-49), wherein captured images are also stored therein (col. 4, lines 62-67).

Regarding claims 11 & 12, see the analysis of claim 1, wherein “external program reception means” is indicated by external connector 116 in combination with communication protocol between the camera and the computer and camera’s CPU 111. See Fig. 1.

Regarding claims 19 & 20, see the analysis of claims 9 & 10.

Regarding claims 21-24, Aizawa also discloses that the recording medium can be a non-volatile memory card which encompasses a flash memory. See col. 11, lines 5-9.

Regarding claims 25 & 26, it is also clear that the communication line (the cable line 115) is external to the digital camera and connected to an external device (200) as shown in Fig. 1.

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Regarding claim 27, Aizawa shows in Fig. 1 that the external device is a personal computer (200).

Regarding claims 29-31, see the analysis of claims 25-27, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-8, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al (US 6,452,629) in view of Ogawa (JP 09-046577).

Regarding claims 13 & 15, Aizawa does not explicitly teach program deleting means for deleting a desired program from the recording medium as required in claim 13 and that the program is program for generating print image data and print data transmitting means for transmitting the print image data generated by executing the program to a printing device as required in claim 15.

Ogawa teaches an image pickup equipment (40) that downloads a printer driver program from an external device (41). It becomes possible to perform direct printing of image to the printer from the image pickup equipment by sending the captured image to a printer (42) using

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the downloaded printer driver (see Figs. 1 & 4; page 3, paragraph [0023]). In addition, Ogawa also suggests that an **elimination** of the downloaded program in the camera is possible (see paragraph [0024]).

Therefore, it would have been obvious to one of ordinary skill in the art to recognize the advantageous teachings of Ogawa to improve the digital camera system in Aizawa by including a printer driver program that is available for downloading from an external device to the camera for printing execution so that direct printing of image to the printer from the camera becomes possible. Furthermore, such a printer driver program would be deleted at any time to save memory space.

Regarding claims 3-6, 14 & 16, see the analysis of claims 13 & 15.

Regarding claim 17, also see the analysis of claim 15 for the communication program being a *printer driver program* for the camera to communicate with the printer. Although the communication between the camera and the printer taught by Ogawa is a wireless communication program instead of a wired communication program, an Official Notice is taken that it is well known in the art that communication *between a camera and a printer* can be configured in either wired or wireless fashion.

Therefore, it would have been obvious to one of ordinary skill in the art to configure the camera to communicate with a printer through communication line utilizing a corresponding printer driver program as an obvious variant over the wireless configuration.

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Regarding claims 7, 8 & 18, see the analysis of claim 17.

5. Claims 28 & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al (US 6,452,629) in view of Steinberg et al (US 6,006,039).

Regarding claims 28 & 32, Aizawa does not explicitly disclose that the external device comprises a modem. However, as taught by Steinberg, the communication port of a digital camera can be a modem (either wireless or wired modem 20) for transferring data between the digital camera and a personal computer or other device, which also includes a modem, as an alternative configuration beside the serial port (16). See Fig. 1; col. 3, line 65 – col. 4, line 15.

Therefore, it would have been obvious to one of ordinary skill in the art to implement a modem connection between the camera and a modem (i.e., a network modem or a modem of computer) for transferring data between the camera and the computer or other devices in a well-known fashion beside the serial communication method.

Note that both serial port and modem must need handshaking protocols for communication between the camera and computer.

Conclusion

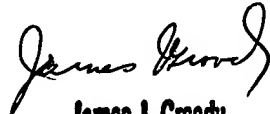
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.


James J. Groody
Supervisory Patent Examiner
Art Unit 262-2615